

Remarks

Claims 1-7, 10-12, 15, 17-23, 26-28, 31 and 47-48 are pending. All pending claims stand rejected under 35 USC §102.

Claim Rejections – 35 USC §102: The Examiner rejected Claim 1-7, 10-12, 15, 17-23, 26-28, 31 and 47-48 under §102(e) as being anticipated by Brown (US Pub. No. 2002/0174180). A claim is anticipated only if the cited reference teaches or suggests the combination of elements required by that claim. As explained below, Brown fails to teach or suggest one or more elements required by each of the pending claims. The rejections are, therefore, improper.

Claim 1 is directed to a coordinated push synchronization method and includes the following combination of elements.

1. detecting changes to a local application data store;
2. identifying a record affected by a detected change;
3. pushing the identified record to a remote application data store;
4. ascertaining whether the pushed record, in its current form as affected by the detected change, has already been replicated or deleted in the remote application data store in order to determine whether the remote application data store will be updated with the pushed record;
5. if not, updating the remote application data store with the pushed record and identifying the pushed record in the remote application data store as having been pushed from the local application data store to the remote application data store, otherwise ignoring the pushed record.

In a response filed July 27, 2005, the Applicant made the following remarks. With respect to the fourth element listed above, Brown does not teach or suggest ascertaining whether a record, ***pushed to a remote application data store***, in its current form has already been replicated or deleted in the remote application data

store *in order to determine whether the remote application data store will be updated with the pushed record.* Furthermore, with respect to the fifth element listed above Brown does not teach or suggest that where it ascertained that the pushed record has not been replicated or deleted, the remote application data store is updated with the pushed record and *the pushed record is identified within the remote application store as having been pushed from the local application data store to the remote application data store.*

In the Present office Action the Examiner, referring to US Pub 2002/0174180 to Brown) responded with the following:

Examiner disagrees with this contention. Note that the invention disclosed by Brown is capable of making a determination as to whether a particular file has been updated on the server through the use of metadata, and that if the file has been updated on the client, it initiates a process to push it back to the remote application store (paragraph 0071). As the invention disclosed by Brown is primarily concerned with the specifics of the synchronization process in the event the file has changed, it is readily apparent that the trivial step of taking no action on an unchanged file is inherent to the Brown disclosure. Even were that not so, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include it, as doing so would save bandwidth by not requiring any data to be sent to update a file that is known to be unchanged on the server.

This statement illustrates the Examiner's fundamental misunderstanding of Claim 1. The fourth element of Claim 1 presumes that, through a push synchronization process, an updated or changed record has been pushed from a local application data store to a remote application data store. After it has been pushed, it is determined if the changed record has already been replicated in the remote application data store. In other words it is determined if the remote data store has already been updated with the changed record through user initiated synchronization. If the remote application data store was already updated, then the

changed record (pushed from the local application data store to the remote application data store) is ignored.

The step of ignoring the pushed record is not trivial as suggested by the Examiner. The Examiner states that "it would have been obvious to one of ordinary skill in the art at the time the invention was made to include it, as doing so would save bandwidth by not requiring any data to be sent to update a file that is known to be unchanged on the server." Contrary to this statement, Claim 1 recites that a changed record is pushed from a local application data store to the remote application data store. That pushed record is ignored leaving the remote application data store unaffected if it is determined that the remote application data store was already updated with the changed record. It is simply not a trivial step to determine whether or not to update a remote data store with a record that has been pushed to that store where that remote application data store may have already been updated through another synchronization process such as user initiated synchronization.

Brown, paragraph [0071] (cited by the Examiner) describes a synchronization process in which a client (managing a remote application data store) actively determines if local application data store (managed by a server) has any changed records. The client does so by sending its current Client Sync index (CSI) to the server. If the CSI does not match the servers SSI (Server Sync Index), then the client requests that the server return server synchronization data used by the client to synchronize its remote application data store with the server's local application data store. In other words, the Client "pulls" the changed record from the server. If there are no changed records, there is no transfer. This process is akin to the user initiated synchronization process described in the present application.

Brown simply does not describe a process in which a changed record is pushed from a local application data store to a remote application data store. Furthermore, Brown does not teach or suggest that, after the record is pushed, that a determination be made as to whether the remote application data store has already been updated with the changed record, and updating the remote application

data store with the pushed record only if the remote application data store has not already been updated.

For at least these reasons, Claim 1 is patentable over Brown. Claims 2-4 and 47 are thus also felt to distinguish over Brown based on their dependency from Claim 1.

Claim 5 is directed to a coordinated user-initiated synchronization method and includes the following combination of elements:

1. detecting changes to a local application data store;
2. identifying a record affected by a detected change;
3. ascertaining whether the identified record, in its current form as affected by the detected change, was pushed to the local application data store from a remote application data store; and
4. if not, synchronizing the remote application data store with the local application data store.

Again, the Examiner misunderstands that which is being claimed. To summarize, a changed record in a local application data store is identified. That change could be the result of one of at least two causes – one cause being a local change in which a user through the use of a local application adds, updates, or deletes the record – the other cause could be that the changed record was pushed to the local application data store from the remote application data store. If it is determined that the changed record was not pushed to the local application data store, then the local application data store is synchronized with the remote application data store.

Rejecting Claim 5, the Examiner contends that Brown paragraph 40 teaches the third and fourth elements listed above. Paragraph 40 is reproduced as follows:

The synchronization process is initiated by a client SA when it makes a sync poll call to the server, passing it the client sync index (CSI) identifying its current known state of the account. If the SSI value matches the CSI value passed in by the polling client, the client is up to date with the current state of its server account. In that case, the server

SFS returns the SSI (having the same value as the CSI) back to the client. Otherwise, the server SFS returns the new higher SSI along with the server metadata information the client needs to transition its account from its current state to the server's current state.

Brown, paragraph [0040].

Paragraph [0040] merely describes a client application (SA) that passes a client sync index (CSI) to a server. If the CSI matches server sync index (SSI) then the client and server are already synchronized. If the server determines that the CSI and SSI do not match, the server returns the SSI and metadata information so that the client's state can be updated to match that of the server.

Nothing in paragraph 40 mentions or suggests ascertaining whether a record (a file or directory) of a client that has been identified as being affected by a detected change on that client was in fact pushed to the client from a server in its current changed form. Furthermore Brown fails to teach or suggest conditionally synchronizing the client with the server if it is ascertained that the identified record in its current changed form was not pushed to the client from the server.

For at least these reasons, Claim 5 is felt to distinguish over Brown. Claims 6, 7, and 48 are thus also felt to distinguish over Brown based on their dependency from Claim 5.

Claim 10 is directed to a coordinated push and user-initiated synchronization method and includes the following combination of elements.

1. detecting changes to a local application data store;
2. identifying a first record in the local application data store affected by a detected change;
3. pushing the first record to a remote application data store;
4. ascertaining whether the pushed record, in its current form as affected by the detected change, has already been replicated in or deleted from the remote application data store and, if not, updating the remote application data store with the pushed record;

5. detecting changes to the remote application data store;
6. identifying a second record in the remote application data store affected by a detected change;
7. ascertaining whether the second record, in its current form as affected by the detected change, has already been pushed into the remote application data store in order to determine whether the remote application data store will be updated with the pushed record and, if not, synchronizing the remote application data store with the local application data store, otherwise ignoring the pushed record.

As with Claim 5, the Examiner contends that Brown paragraph 40 teaches the fourth element listed above. As with Claim 1, the Examiner contends that Brown paragraphs 79-83 teach the seventh element listed above. As made clear above with reference to Claims 1 and 5, The Examiner's contentions are mistaken. Brown fails to teach or suggest the fourth and seventh elements.

For at least these reasons, Claim 10 is felt to distinguish over Brown. Claims 11, 12, and 15 are thus also felt to distinguish over Brown based on their dependency from Claim 10.

Claim 17 is directed to a computer readable medium having instructions for performing the method steps of Claim 1. For the same reasons Claim 1 distinguishes over Brown so does Claim 17. Claims 18-20 are thus also felt to distinguish over Brown based on their dependency from Claim 17.

Claim 21 is directed to a computer readable medium having instructions for performing the method steps of Claim 5. For the same reasons Claim 5 distinguishes over Brown so does Claim 21. Claims 22 and 23 are thus also felt to distinguish over Brown based on their dependency from Claim 21.

Claim 26 is directed to a computer readable medium having instructions for performing the method steps of Claim 10. For the same reasons Claim 10 distinguishes over Brown so does Claim 26. Claims 27, 28, and 31 are thus also felt to distinguish over Brown based on their dependency from Claim 26.

Conclusion: All pending claims are felt to be in condition for allowance. The foregoing is believed to be a complete response to the outstanding office action.

Respectfully submitted,
Richard Detweiler, et al

By



Jack H. McKinney
Reg. No. 45,685

October 25, 2005